

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Claim 1 (currently amended): A method for monitoring the operation of data collection on the operation of a packet transmission communication network comprising interconnected routers, each of said routers including a routing unit and a control unit supervising the routing unit, the such that each of said routers has its respective said routing unit being arranged for transferring first packets between external ports of that said router and for transferring second packets between the external ports of the that said router and an internal port connected to the control unit of that said router, the method comprising the following steps performed by any of said routers, parallel to the transfer of first and second packets by the routing unit of said any of said routers:

- selecting packets corresponding to at least some of the second packets transferred at said internal port of a router said any of said routers by means of a determined collection filter; and

- recording a content of the selected packets on a recording medium, said content comprising data on the operation of the network, wherein the selection of packets and an extraction of said content to be recorded of the selected packets are carried out by means of a collection module disposed inside said any of said routers router and connected to said internal port of said router any of said routers.

Claim 2 (previously presented): The method as claimed in Claim 1, wherein a recording unit is connected to the communication network, remote from said router, and said content of the selected packets is sent to said recording unit.

Claim 3 (previously presented): The method as claimed in Claim 2, also comprising a formatting of said content of the selected packets prior to the sending of this content to the recording unit via the communication network, the formatting comprising the assignment to the content of address data corresponding to the recording unit.

Claim 4 (previously presented): The method as claimed in Claim 3, wherein the content of the selected packets is encrypted prior to the sending of this content to the recording unit via the communication network.

Claim 5 (previously presented): The method as claimed in Claim 1, wherein the collection module is remotely programmable by means of program codes sent to the collection module via the communication network.

Claims 6 - 8 (cancelled)

Claim 9 (previously presented): The method as claimed in Claim 1, also comprising a step of reading recorded contents of selected packets.

Claim 10 (previously presented): The method as claimed in Claim 5, also comprising a selection step according to a filter for reading recorded contents of packets selected according to the collection filter.

Claim 11 (previously presented): The method as claimed in Claim 1, wherein said content of a selected packet is recorded with coordinates of said selected packet.

Claim 12 (original): The method as claimed in Claim 11, wherein the recorded coordinates of a selected packet comprise a timestamp of the collection of said selected packet.

Claim 13 (previously presented): The method as claimed in Claim 11, wherein the recorded coordinates of a selected packet comprise an address of the router which contains said internal port at which said second packet corresponding to said selected packet is transferred.

Claim 14 (currently amended): A system for monitoring of data collection on the operation of a packet transmission communication network comprising interconnected routers, each of said routers including a routing unit and a control unit supervising the routing unit, the such that each of said routers has its respective said routing unit being arranged for transferring

first packets between external ports of that said router and for transferring second packets between the external ports of the that said router and an internal port connected to the control unit of that said router, the system comprising:

- a means for selecting packets corresponding to at least some of the second packets transferred at said internal port of a router one of said routers by means of a determined collection filter and for extracting the content to be recorded; and
- a unit for recording a content of the selected packets on a recording medium, wherein said one of said routers router incorporates a collection module connected to said internal port of said one of said routers and comprising the means of selection.

Claim 15 (previously presented): The system as claimed in Claim 14, wherein the recording unit is connected to the communication network remotely from said router.

Claim 16 (original): The system as claimed in Claim 15, also comprising means of formatting said content of the selected packets.

Claim 17 (previously presented): The system as claimed in Claim 15, wherein the formatting means comprise means of assigning to the content address data corresponding to the recording unit.

Claim 18 (previously presented): The system as claimed in Claim 15, also comprising an encryption module for encrypting said content of the selected packets.

Claim 19 (cancelled)

Claim 20 (previously presented): The system as claimed in Claim 14, wherein the collection module is arranged for receiving programming codes of the collection module via the communication network.

Claim 21 (cancelled)

Claim 22 (previously presented): The system as claimed in Claim 14, also comprising means for reading on the recording medium the recorded content of selected packets.

Claim 23 (original): The system as claimed in Claim 22, also comprising means for selecting recorded contents of packets according to a read filter, when the contents of packets selected according to the collection filter are read on the recording medium.

Claim 24 (previously presented): The system as claimed in Claim 14, wherein the recording unit is arranged for recording said content of a selected packet with coordinates of said selected packet.

Claim 25 (original): The system as claimed in Claim 24, wherein the recorded coordinates of a selected packet comprise a timestamp of the collection of said selected packet.

Claim 26 (previously presented): The system as claimed in Claim 24, wherein the recorded coordinates of a selected packet comprise an address of the router which contains said internal port at which said second packet corresponding to said selected packet is transferred.

Claim 27 (previously presented): The system as claimed in Claim 14, also comprising a unit for simulating the operation of the communication network by using the recorded contents of selected packets.

Claim 28 (previously presented): The system as claimed in Claim 14, also comprising a unit for constructing and/or updating, based on the recorded contents of selected packets, a table for determining paths intended to be respectively assigned to packets transferred by the routing unit of the router.

Claim 29 (previously presented): A router for a packet transmission communication network, comprising a routing unit and a control unit supervising the routing unit, the routing unit being arranged for transferring first packets between external ports of the router and for transferring second packets between the external ports of the router and an internal port

connected to the control unit, characterized in that it wherein said router also comprises a collection module connected to an interface between the routing unit and the control unit for selecting at least some of the second packets and extracting a content to be recorded of the second packets selected in parallel with the transfer of first and second packets by the routing unit.

Claim 30 (previously presented): A method for characterizing a part of an operation of a packet transmission communication network comprising interconnected routers each including a routing unit and a control unit supervising the routing unit, the routing unit being arranged for transferring first packets between external ports of said router and for transferring second packets between the external ports of the router and an internal port connected to the control unit, said method using data on the operation of said network collected by carrying out the following steps, parallel to the transfer of first and second packets by the routing unit:

- selecting packets corresponding to at least some of the second packets transferred at said internal port of a router by means of a determined collection filter; and
- recording a content of the selected packets on a recording medium, said content comprising said data on the operation of the network,
wherein the selection of packets and an extraction of said content to be recorded of the selected packets are carried out by means of a collection module disposed inside said router and connected to said internal port of said router.

Claim 31 (previously presented): The method as claimed in Claim 30, wherein the collected data are also used to simulate said part of operation of the network.